After Final Office Action of December 17, 2009

### **AMENDMENTS TO THE CLAIMS**

### 1. (Previously presented) A focus state display comprising:

focus state judging means for judging a focus state of an image captured from imaging means; and

focus state display means for displaying information that indicates the focus state according to the focus state obtained by the focus state judging means on display means,

wherein the focus state judging means determines a focus state value and compares the focus state value to a first focus state threshold and a second focus state threshold, the focus state judged to be in focus if the focus state value is greater than or equal to the first focus state threshold, the focus state judged to require adjustment to become in focus if the focus state value is between the first and second thresholds, and the focus state judged to be incompetent to indicate focus if the focus state value is below the second focus state threshold.

## 2. (Currently Amended) A focus state display, comprising:

focus state judging means for judging a focus state of an image captured from imaging means;

focus state storage means for storing temporal progress of the focus states of images obtained by the focus state judging means with temporal progress of the captured images;

focus direction judging means for judging a focus direction from the temporal progress of the focus states obtained by the focus state storage means; and

focus state display means that, according to the focus direction obtained by the focus direction judging means, displays information that indicates its focus state and focus direction on display means,

wherein the focus state judging means determines a focus state value and compares the focus state value to a first focus state threshold and a second focus state threshold, the focus state judged to be in focus if the focus state value is greater than or equal to the first focus state threshold, the focus state judged to require adjustment to become in focus if the focus state value is between the first and second thresholds, and the focus state judged to be incompetent to indicate focus if the focus state value is below the second focus state threshold.

3. (Original) The focus state display according to either claim 1 or claim 2, wherein

the focus state display means indicates the focus state obtained by the focus state judging

means with a plurality of graphic forms as many as a number according to its focused state.

4. (Previously Presented) The focus state display according to claim 2, wherein

the focus state display means indicates the focus direction obtained by the focus direction

judging means with symbols.

5. (Original) The focus state display according to either claim 1 or claim 2, further

comprising light emitting means, wherein

the focus state display means indicates the focus state obtained by the focus state judging

means by making the light emitting means blink or turn on.

6. (Previously presented) The focus state display according to either claim 1 or

claim 2, further comprising sounding means, wherein

the focus state display means informs the user of the focus state obtained by the focus

state judging means by making the sounding means emit sound.

7. (Original) The focus state display according to either claim 1 or claim 2, further

comprising filtering means for eliminating high spatial frequency components of image data,

wherein

the focus state display displays the image data by removing a wider range of high spatial

frequency components with the filtering means as the focus state becomes worse based on the

focus state obtained by the focus state judging means.

8. (Previously Presented) A portable terminal device comprising imaging means

for picking up an image and display means for displaying the image obtained by the imaging

means, further comprising

MRC/JCL/lps

3

### 9.-10. (**Cancelled**)

11. (**Previously presented**) A computer-readable recording medium characterized by recording a program that makes a computer execute a focus state display comprising:

focus state judging means for judging a focus state of an image captured from imaging means; and

focus state display means for indicating information about its focus state on display means according to the focus state obtained by the focus state judging means,

wherein the focus state judging means determines a focus state value and compares the focus state value to a first focus state threshold and a second focus state threshold, the focus state judged to be in focus if the focus state value is greater than or equal to the first focus state threshold, the focus state judged to require adjustment to become in focus if the focus state value is between the first and second thresholds, and the focus state judged to be incompetent to indicate focus if the focus state value is below the second focus state threshold.

12. (Currently amended) A computer-readable recording medium characterized by recording a program that makes a computer execute a focus state display comprising:

focus state judging means for judging a focus state of an image captured from imaging means:

focus state storage means for storing the focus states of the images obtained by the focus state judging means with temporal progress of the focus states;

focus direction judging means for judging a focus direction from the temporal progress of the focus states obtained by the focus state storage means; and

focus state display means for indicating information about its focus state and focus direction on display means according to the focus direction obtained by the focus direction judging means,

Docket No.: 1254-0279PUS1

After Final Office Action of December 17, 2009

wherein the focus state judging means determines a focus state value and compares the

focus state value to a first focus state threshold and a second focus state threshold, the focus state

judged to be in focus if the focus state value is greater than or equal to the first focus state

threshold, the focus state judged to require adjustment to become in focus if the focus state value

is between the first and second thresholds, and the focus state judged to be incompetent to

indicate focus if the focus state value is below the second focus state threshold.

13. (**Previously presented**) The focus state display according to claim 1, wherein if

the focus state cannot be measured, the focus state cannot be calculated due to any of brightness,

shape and patterns of the image.

14. (**Previously Presented**) The focus state display according to claim 2, wherein if

the focus state cannot be measured, the focus state cannot be calculated due to any of brightness,

shape and patterns of the image.

15. (Previously presented) The focus state display according to claim 1, wherein the

focus state display means indicates the focus state cannot be measured when the focus state

judging means judges that the focus state is not capable of being measured.

16. (Previously presented) The focus state display according to claim 2, wherein the

focus state display means indicates the focus state cannot be measured when the focus state

judging means judges that the focus state is not capable of being measured.

17. (**Previously presented**) A focus state display comprising:

a focus judging section that judges a focus state of an image captured from a camera and

a focus state display that displays information that indicates the focus state according to

the focus state obtained by the focus judging section,

wherein the focus state judging section determines a focus state value and compares the

focus state value to a first focus state threshold and a second focus state threshold, the focus state

After Final Office Action of December 17, 2009

judged to be in focus if the focus state value is greater than or equal to the first focus state threshold, the focus state judged to require adjustment to become in focus if the focus state value is between the first and second thresholds, and the focus state judged to be incompetent to indicate focus if the focus state value is below the second focus state threshold.

# 18. (Currently Amended) A focus state display, comprising:

- a focus judging section that judges a focus state of an image captured from a camera;
- a focus storage section that stores temporal progress of the focus states of images obtained by the focus judging section with temporal progress of the captured images;
- a focus direction judging section that judges a focus direction from the temporal progress of the focus states obtained by the storage section; and
- a focus state display that, according to the focus direction obtained by the focus direction judging section, displays information that indicates its focus state and focus direction on a display,

wherein the focus state judging section determines a focus state value and compares the focus state value to a first focus state threshold and a second focus state threshold, the focus state judged to be in focus if the focus state value is greater than or equal to the first focus state threshold, the focus state judged to require adjustment to become in focus if the focus state value is between the first and second thresholds, and the focus state judged to be incompetent to indicate focus if the focus state value is below the second focus state threshold.

# 19. (**Previously presented**) The focus state display according to claim 1, wherein the focus state display means displays an indication informing the user that the in-focus state exists in the direction in which the camera moves closer to the object, or an indication informing the user that the in-focus state exists in the direction in which the camera moves away from the object.

20. (**Previously presented**) The focus state display according to either claim 1 or claim 2, further comprising a sounding means, wherein

Application No. 10/532,051

Amendment dated March 12, 2010

After Final Office Action of December 17, 2009

the focus state display means emits, via the sounding means, a voice that instructs the

user of a direction to move the camera if the judged focus state is not in focus or impossible to

measure, and informs the user of the focus state when the judged focus state is in focus and when

the focus state is impossible to measure.

21. (Previously presented) The focus state display according to claim 5, wherein the

light emitting means is turned steadily on the focus state is judged to be in focus, and blinks

when the focus state is judged to require adjustment.

22. (Previously presented) The focus state display according to claim 21, wherein

the light emitting blinks at a rate commensurate with the determined focus state value.

23. (Currently Amended) The focus state display according to claim 6, wherein the

sound is emitted at a first audio frequency when the focus state is judged to be in focus, sound is

emitted at a second audio frequency when the focus state is judged to be incompetent to indicate

focus, and sound is emitted at third and or fourth frequencies when the focus state is judged to

require adjustment, the third and fourth frequencies being respectively higher and lower than the

first-frequency and dependent upon whether the in-focus state is judged to exist in a direction in

which the imaging means moves, respectively, closer to or away from an object of focus.

24. (Previously presented) The focus state display according to claim 6, wherein the

emitted sound is a reproduced human voice instruction.

7

MRC/JCL/lps